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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/005,381 01/15/93 NILSEN

OLE K. NILSEN  
CAESAR DRIVE  
BARRINGTON, IL 60010

B5M2/1006

EXAMINER	
MIS, D	
ART UNIT	PAPER NUMBER
	11

2502  
DATE MAILED:

10/06/93

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 7/26/93 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), 0 days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892.        | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.             | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152.       |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/>   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-46 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-46 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☒ The corrected or substitute drawings have been received on 7/26/93. Under 37 C.F.R. 1.84 these drawings are ☒ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

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1. Claims 1-46 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are indefinite since:

a. Claim 1, line 6, "high-frequency" is unclear since reference to the frequency which is not "high" is not said until line 10, i.e. antecedence should be provided that clarifies "high"; lines 8-9, "certain magnitude and certain frequency" is unclear since "certain" is ambiguous since it may refer to the accuracy of the inverter or to the design values of the magnitude and frequency, and it is not clear why the "high-frequency" is now a "certain frequency", and using "certain" before both "magnitude" and "frequency" incorrectly implies that the magnitude and frequency are equal, and so "certain" may be replaced by --inverter circuit-- or otherwise clarified; line 9, "substantially" is unclear since substantial amounts of frequency difference are not necessarily more than a fraction of a Hertz or orders of magnitude, i.e. it is not particularly pointed out what frequencies are intended; lines 10-11, "an ordinary electric utility power line" is a means that is referred to merely with regards to the frequency of the voltage on it, yet it is referred to in the recitation of the function performed by the inverter which is comprised in the claimed "arrangement", and so it is not clear if the "power line" is included in the "arrangement" or not, and it is not clear where the "power line" is with respect to the "arrangement", i.e. reference to the "power line" is unclear since it is a range of frequencies that is referenced, and it is not even certain which power line, of

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the many different ones conducting respective currents which are not necessarily 50-60 Hertz in all of the equipment owned by utilities, is the ordinary one referred to, and so reference should be to the number of Hertz instead of to a frequency of a voltage on a power line; line 15, "said certain frequency" is unclear as above; lines 15-24, "the inverter circuit being further characterized in that: ... comparison to said certain magnitude" is unclear due to reliance on that which precedes it which is unclear, and since "any AC voltage of frequency equal to that of the high-frequency AC voltage existing between the reference terminal and the first DC terminal is of negligible magnitude compared with said certain magnitude;" is improperly punctuated and should be (ignoring that which is indefinite from above) --any AC voltage, of frequency equal to that of the high-frequency AC voltage, existing between the reference terminal and the first DC terminal, is of negligible magnitude compared with said certain magnitude;--, and since it is not clear what voltage "any AC voltage" is since that which exists, between the reference terminal and the first DC terminal, or between the two DC terminals, could be anything in existence while it is not particularly pointed out what in existence is inventive which is effected by or makes use of "any voltage", and even if it is particularly pointed out that it is e.g. the inverter circuit which is what "any voltage" concerns, it remains unclear what produced the respective "any voltage"s, i.e. exactly what in all known inverters produces such voltages, or what is the definition of the characteristic of all known inverters, or of anything else, that is referred to as "any voltage", and "negligible" is unclear since it is a relative amount

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and it is not said what is not negligible to particularly point out that which is negligible by definition, and in line 21, "voltage" should be --voltage,--, and in line 22, "voltage" should be --voltage,--, and in line 23, "terminals" should be --terminals,-- (the last three punctuation corrections not made with regard of previous indefiniteness above).

b. Claims 2-46 incorporate indefinite language substantially as that of claim 1 above.

2. The functional recitations of the claims have not been given patentable weight because they are narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a "means" for performing the specified function, as set forth in 35 USC § 112, 6th paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. *In re Fuller*, 1929 C.D. 172; 388 O.G. 279.

That is, practically any reference anticipates that which is claimed since there is not much remaining in the claims when that which is not given patentable weight is not applied. And so, priority should be given to making the claims definite so that sensible application of references can be performed.

3. Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL.** See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

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A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Mis whose telephone number is (703) 308-4907.



DAVID MIS  
EXAMINER  
GROUP ART UNIT 252

dm  
October 5, 1993